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ALIGNMENTS

REFERENCE AUTHORS TITLE RESULT 1 A50396 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORIGIN FEATURES COMMENT Query Match Best Local Similarity Matches 447; JOURNAL ORGANISM source 181 121 121 61 61 GCTTTGTTCTCATGCTTGCTTACACCCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA 1 (bases 1 to 447) Maertens,G. and Stuyver,L. New SEQUENCES OF HEPATITIS C VIRUS GENOTYPES AND PROPHYLACTIC, THERAPBUTIC AND DIAGNOSTIC AGENTS PATENT: WO 9613590-A 51 09-MAY-1996; INNOGENETICS NV. (BE) A50396 Sequence 51 from Patent A50396 Other publication AU 3844095 960523. Location/Qualifiers unidentified unclassified. unidentified AS0396.1 GI:2303407 GCTTTGTTCTCATGCTTACACCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA ATCCTCCACTTACCTGGCTGTGCCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT 99.7%; Score 445.8; DB 6; ilarity 100.0%; Pred. No. 9.5e-109; Conservative 0; Mismatches 0; /organism="unidentified" /mol_type="unassigned DNA" /db_xref="taxon:32644" 447 bp : WO9613590. DNA Length 447; Indels linear THEIR PAT 07-MAR-1997 <u>,,</u> Gaps 180 120 120 180 60 60

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Maertens,G. and Stuyver,L.
Sequences of hepatitis C virus genotypes
prophylactic, therapeutic and diagnostic
Patent: US 6180768-A 51 30-JAN-2001;
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                                    CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGACATCGCCAGCATTGG
                                                                                 ACGCACGTGGATATGATGGTGGGRGCGGCCACCCTATGCTCAGGTCTCTACGTAGGAGAC
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Db 421 ACTGTCCAGGACTGCAACTGTTCCATC 447
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van Doorn,L.J., Kleter,G.B., Stuyver,L., Maertens,G.
Schalm,S.W., Heijtink,R.A. and Quint,W.G.
Sequence analysis of hepatitis C virus genotypes 1
multiple novel subtypes in the Benelux countries
J. Gen. Virol. 76 (Pt 7), 1871-1876 (1995)
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van Doorn,L.J., Kleter,B., Stuyver,L., M
Schalm,S., Heijtink,R. and Quint,W.
Analysis of hepatitis C virus genotypes
correlation with antibody profiles
J. Hepatol. 21 (1), 122-129 (1994)
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nilarity 100.0%;
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/product="precursor protein"
/protein id="AAA67840.1"
/protein id="AAA67840.1"
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TUNDCSNGSITYEAGDIILHLPGCVPCVRSGNTSRCWIPVSPTVAVKSPCAATASLRTH
VDMMVGAATLCSALYYGDLCGALFLVGQGFSWRHRQHWTVQDCNCSI"
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/note="putative"
}7...447
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/mol_type="genomic RNA"
/db_xref="taxon:40363"
/clone="NL96"
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                                                                                                                                                                                                                                                                                                                                                                  Submitted (17-MAR-1995) Hiroaki Okamoto, Jichi Medical Immunology Division; Minamikawachi-machi, Kawachi-gun, 329-04, Japan (B-mail:hokamotog/jchi.ac.jp, Tel:0285-44-2111(ex.3334), Fax:0285-44-1557)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lesmana, L.A., Miyakawa, Y. and Mayumi, M.
Hepatilis C virus variants from Jakarta, Indonesia classifiable into novel genotypes in the second (2e and 2f), tenth (10a) and eleventh (11a) genetic groups
J. Gen. Virol. 77 (Pt 2), 293-301 (1996)
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Hepatitis C virus
Hepatitis C virus
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/translation="MSTLPKPQRITKRNINRRPQDVKFPGGGQIVGGVYVLPRRGPKL
GVRAVKKTSERSQPRSRRQPIPRARRTEGRSWAQDESPWPLYGBGGGGWAGWILLSPRG
SRPSWGPNDPRRSSWLGKVLDTHTGGPADLMCYIPLUGAPVGGVARALHGYRALES
GINPATGNLPGCSFSIFLLALLSCLLTPTAGLEYRNASGLYTVTNDCNGSIVYEAGD
VILHLEGCIPCVRLNNASKCWTPVSPTVAVSRPGAATASLRTHVDMMVGAATLCSALY
VGDLCGALFLUGGGESWHRGHWYDGVAGYSWAGYSWAGYLCLCSLY
VGDLCGALFLUGGGESWHRGWAGVAYYSMOGNWAKVFLVLCLFSGVDASTTITGGVA
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/product="core, env, and p.
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/db_xref="GI:1197111"
                                                                                                                                                                                                                                                                 /db_xref="taxon:11103"
                                                                                                                                                                                                                                                                                       organism="Hepatitis C virus"
/mol type="genomic RNA"
/isoTate="JK049"
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Miyakawa,Y. and Mayumi,M.
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                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis C virus isolate JK055 EZ/NS1, partial cds. D49750
           Submitted (17-MAR-1995) Hiroaki Okamoto, Jic
Immunology Division, Minamikawachi-machi, Ka
329-04, Japan (8-mail:hokamoto@jichi.ac.jp,
Tel:0285-44-2111(ex.3334), Fax:0285-44-1557)
Location/Qualifiers
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Hepatitis C virus
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                                                                                                       Okamoto, H.
                                                                                                                                    Unpublished
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Pred. No. 1.5e-94;
3; Mismatches 33
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core, env, and part of E2/NS1.
Hepatitis C virus
Hepatitis C virus
Viruses; ssRNA positive-strand viruses,
                                                                           Hepatitis C virus E2/NS1, partial cc D49752
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Hepacivirus.
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/product="core, env, and p
/protein_id="BAA08584.1"
/db_xref="GI:1197115"
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isolate="JK055"
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          DNA stage; Flaviviridae;
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                                                                                 ATCCCTGTGAGCCCYACCGTCGCCGTGAAGTCGCCCTGCGCCACCGCCTCTCTCCGC
                                                                                                                                         ATCCTCCACTTACCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG
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                                                                                                                  ATCCTCCACTTGCCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGTTGG
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1 (sites)

Tokita, H., Okamoto, H., Iizuka, H., Kishimoto, J., Tsuda, F.,

Iesmana, L.A., Miyakawa, Y. and Mayumi, M.

Hepsatitis C virus variants from Jakarta, Indonesia classifiable into novel genotypes in the second (2e and 2f), tenth (10a) and eleventh (11a) genetic groups

J. Gen. Virol. 77 (Pt 2), 293-301 (1996)
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                Conservative
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/isoTate="JK070"
/db xref="taxon:11103"
<1. .339
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SQVLRLPQTIFDLVAGAHWGVMAGVAYYSMQGNWAKVFLVLCLFSGVDASTTISGGSA
ARSVWGITSLFSPGSNQNLQLVN"
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           Score 393; DB Pred. No. 1.5e-3; Mismatches
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Heparitis C virus variants from Jakarta, Indonesia classifiable into novel genotypes in the second (2e and 2f), tenth (10a) and eleventh (11a) genetic groups
J. Gen. Virol. 77 (Pt 2), 293-301 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (10-AUG-1995) Hiroaki Okamoto, Jichi Medical Immunology Division; Minamikawachi-machi, Kawachi-gun, 329-04, Japan (E-mail:hokamotog)ichi.ac.jp, Tel:0285-44-2111(ex.3334), Fax:0285-44-1557)
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Hepatitis C virus
Hepatitis C virus
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             /translation="MSTLEKPQRITKRNINRRPQDVKFPGGGQIVGGVYVLPRRGPKL
GVRAVRTSERGQPRSRRQPIPRARRTEGERSWAQPGYPWPLYCNEGCCWAGWILSPRG
SRPSWGPNDFRRSRNLGKVIPTUTCGFADLMGYIPLYCWGGVPARALAHGVVRALED
GINPATCHLPGGSPSIFLTLALLSCLLPTAGLEYRNASGLYTVTUDCSMSIYVPAGD
VILHLPGGIPCVRLNNASKCWTPVSPTVAVSRPGAATASLRTHVDMMVGAATLCSALY
VGDLCGALFLVGGGFSWRHRQHWTVQDCNCSIYPGHLTGHRWAWDMMVGWSPAMTLIV
VGDLCGALFLVGGGFSWRHRQHWTVQDCNCSIYPGHLTGHRWAWDMMVGWSPAMTLIV
SQVLRLFGTGAKGCVALHAUNGSWHINRTALNCNDSLATGGLAYYHKFMSV
ASGAFTITSLFSTGAKGAPTYTWGENESDYPLLESARPTEPWFGCTWMGSGVVKTCG
GCTPSVVVGATGKKGAPTYTWGENESDYPLLESARPTEPWFGCTWMGSGVVKTCG
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                                                                                                                                                                                                                                  /evidence=not_experimental
/product="polyprotein"
/protein_id="BAA09890.1"
/db_xref="GI:1183033"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="genomic RNA for polyprotein precursor, complete
                                                                                                                                                                                                                                                                                                                                                 citation=[2]
                                                                                                                                                                                                                                                                                                                                                                                     evidence=not_experimental
                                                                                                                                                                                                                                                                                                                                                                                                                citation=[2]
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isolate="JK049"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Hepatitis C virus"
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EDSTSGVGTOGGGLTGPVQLDDDDSDNESHSSMPPLEGEPGDPDLSSGSWSTVSGEE
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TFDRLQVLDDHYNTTLKELKSLASGVKAELLSVEBACRLVPSHSARSKFGYGAKEKVS
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ICEKRALYDVIQKLPSAIMGSAYGFQYSPKQRVEYLLKWMNSKTCPLGFSYDTRCFDS
TVTEQDIRVESIYQACDLKDEARRVITSLTERLYCGGPMFONSKGQHCGYRRCRASGV
LPTSFGNTVTCYLKAKAATKAAGIKDBSFLVCGDLVVIAESAGIDEDKSALRAFTEA
MTRYSAPPGDPPQPTYDLELITSCSSNVSVAHDGAGKRYYYLTRDPFTPLARAAWETA SPYPIPALSTGLIHLHQNIUVQYLYGISSGLYGMAIKMEFVILIFLLLADARVCVVL MMMMLISQAEAALENLIVLNAISAAGTHGIMWSLVAFCYAMHVRGRIFPIAVYSIYGL WELLLLUYMLYGYRAYAMTGTDTSTLGAGVLSLEALFTLSPMYKHWIARLIMWNQVTI RCEAALQIMVPPLLARGARDGIILLAGLFYPALVFDITKLLLAILGPLYILQASLVRV GLLLLTVGVGIFLLPAR" RHTPVNSWLGNI IMYAPTIWVRMVIMTHFFSILQAQEQLEKALDFEMYGAVYSVTPLD LPAIIERLHGLSAFSLHSYSEVELNRVAGALRKLGIPPLRAWRHRARAVRAKLISQGG KAKICGLYLFNWAVRTKAKLTPLPQAGLLDLSRWFTVGAGGNDIYHSVGRARSRHLLL ARRRGDSTASLLSPRPLACLKGSSGGPIMCPSGHVAGI FRAAVCTRGVAKALQFI PVE SLSAQTRSPSFSDNSTPPAVPQTFQVGYLHAPTGSGESTKVPASYVAQGYTVLVLNPS VAATLGFGREMSHAYGIDPNVRTGTRTITTGAKLTYSTYGKFLADGGCSGGAYDVII C PYFVRAHAVVRLCILVRNITGGKYVQMVLLALARGFNTYLYDHLSPMTDWAAEGLKDL AVAVEPVIFSPMEVKVITWGADTTACGDILCGLPVSARLGKEVLLGPADDYRSMGWRL LAPITAHAQQTRGLFGTIVTSLTGRDKNIVTGEIQVLSTSTQTFLGTSVGGVMWTVYH GAGSRTLAGNKRPALQMYTNVDQDLVGWPSPPGAKSLVPCTCGSADLYLITRDADVLP

Matches 411; Query Match Best Local 3'UTR Similarity Conservative /citation=[2] note="with evidence=not_experimental 87.9%; 91.9%; ω --17nt of T-stretch' Score 393; DB 14; Pred. No. 1.7e-94; 3; Mismatches 33;

Length 9450; Indels

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Gaps

ORIGIN

문 Ś 용 Ś 밁 ঠ 밁 ঠ 문 Ś 1057 301 241 997 937 877 817 181 121 CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT 61 GCTTTGTTCTCATGCTTGCTTACACCCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA GACGGAATCAATTTCGCAACAGGGAATTTACCTGGTTGCTCTTTCTCTATCTTCCTCTTG ACGCACGTGGATATGATGGTGGGRGCGGCCACCCTATGCTCAGCTCTCTACGTAGGAGAC ACCCCTGTAAGCCCTACCGTCGCCGTGAGTCGCCCTGGCGCCTACCGCCTCTCTCCGC ATCCCTGTGAGCCCYACCGTCGCGTGAAGTCGCCCTGCGCCCACCGCCTCTCTCCGC ATCCTCCACTTGCCTGGCTGTATCCCCCTGCGTGCGCTTAAACAATGCATCAAAATGCTGG ATCCTCCACTTACCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG CTCTACACGGTAACCAACGACTGTAGTAACGGTAGCATCGTGTATGAGGCCCGGGGATGTT GCTTTGCTCTCATGCTTGCTTACACCCACAGCCGGGCTGGAGTATCGTAATGCCTCCGGA 300 1056 180 120 360 240 996 936 876 60 1116

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (17-MAR-1995) Hiroaki Okamoto, Jic Immunology Division, Minamikawachi-machi, Ka 329-04, Japan (E-mail:hokamoto@jichi.ac.jp, Tel:0285-44-2111(ex.3334), Fax:0285-44-1557)
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Hepatitis C virus isolate
E2/NS1, partial cds.
D49747
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Hepatitis C virus
Hepatitis C virus
Viruses; ssRNA positive-strand viruses, no
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J. Gen. Virol.
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  ACTGTCCAGGACTGCAACTGTTCCATC 447
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                                                     Conservative
                                                                                                                                                                                            tranalation="MSTLPKPQRITKRNTNRRPQDVKFPGGGQIVGGVYVLPRRGPKL
GVRAVRKTSERSQPRSRQPIPRARTTEGRSWAQDGYPWPLYGWGCGWAGWLLSPRG
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IIIHLPGCVPCVRSGNTSKCWTSVSPTVAVSHPGAATASIRTHYDMWVGAATLGSLLY
VGDLCGALFLVCQGFSWKRRQJWTVQDCNCSIVFGHLTGHAWAWDMWMWSPAATLVS
VGVLRLPGTILDLVIGAHWGVWAGVAYYSMQGNWAKVFLVLCLFSGVDASTRISGGSA
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                                                                                                                                                                        AHNTYGLSSLFSSGPKQNIQLIN"
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/product="core, env, and part of E2/NS1"
/protein id="BAA08581.1"
/db_xref="GI:1197103"
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Hepatitis C virus variants from Jakarta, Indonesia classifiable into novel genotypes in the second (2e and 2f), tenth (10a) and eleventh (11a) genetic groups
J. Gen. Virol. 77 (Pt 2). 291-200
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                                                                                                                                                                                                                                             Submitted (17-MAR-1995) Hiroaki Okamoto, Jichi Medical Immunology Division; Minamikawachi-machi, Kawachi-gun, 329-04, Japan (E-mail:hokamoto@jichi.ac.jp, Tel:0285-44-2111(ex.3334), Fax:0285-44-1557)
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Hepatitis C virus
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/evidence=not_experimental
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                                                citation=[2]
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El envelope protein; core protein.
Hepatitis C virus
Hepatitis C virus
Viruses; seRNA positive-strand viruses,
 Hotta,H., Handajani,R., Lusida,M.I., Soemarto,W., I Miyajima,H. and Homma,M. Subtype analysis of hepatitis C virus in Indonesia NS5b region sequences J. Clin. Microbiol. 32 (12), 3049-3051 (1994) 95189942
                                                                                                                                                                                                                                  HPCCP3 . 411 bp RNA linear VRL 07-FEB-1999 Hepatitis C virus (individual isolate Td-3/93) gene for polyprotein precursor, partial cds (core protein (carboxy terminus) and El envelope protein (amino terminus half)).
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Unpublished
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7-5-1 Kusunoki-cho, Chuo-ki
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llarity 90.0%;
Conservative
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078-351-6347.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hepatitis C virus"
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/product="polyprotein_precursor"
/protein_id="BAA06282.1"
/db xref="G:485799"
/tabslation="LSCLTPTAGLEYRNASGLYIVTNDCSNGSIVYBAQDIILHMPG
/bpcvrsgnysrcwypsysvavgragaataslrthvDmMvGaatlCSaLYVGDLCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="The carboxy terminus of the core protein and amino terminal half of the E1 envelope protein of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LFLVGQGFSWRHRQHWTVQDCNCSIYPGHLTGHRM"
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/mol_type="genomic RN
/isolate="Td-3/93"
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Pred. No. 9.7e-76;
3; Mismatches 35
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Gaps

KEYWORDS SOURCE ORGANISM

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ACCESSION VERSION

RESULT HPCCP3 LOCUS

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MEDLINE
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Best Local
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              121
                                   798
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                                                                                           Tokita, H., Shrestha, S.M., Okamoto, H., Sakamoto, M., Horikita, M., Iizuka, H., Shrestha, S., Miyakawa, Y. and Mayumi, M. Hepatitis C virus variants from Nepal with novel genotypes and their classification into the third major group J. Gen. Virol. 75 (Pt 4), 931-936 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shrestha, S.M., Tsuda, F., Okamoto, H., Tokita, H., Horikita, M., Tanaka, T., Miyakawa, Y. and Mayumi, M. Hepatitis B virus subtypes and hepatitis C virus genotypes in patients with chronic liver disease in Nepal Hepatology 19 (4), 805-809 (1994)
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Hepatitis C virus
Viruses; ssRNA positive-strand viruses,
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Hepatitis C virus RNA
D16614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Immunology Division Jichi Medical School
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E2/NS1; core protein; envelope protein
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                                                                                                                                       Similarity
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                                                    GCTTTGTTCTCATGCTTACACCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA 120
CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT
                                                                              GCTCTCTTCTCATGCTTGGTTTCCCCCCGCAGCGGGGCTAGAGTACAGGAACACGTCCGGC
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                                                                                                                           Conservative
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0285-44-1557.
                                                                                                                                                                                                                                                                                                                                 261. .>1505
                                                                                                                                                                                                                                                                                                                                                                            /mol_type="genomic RNA"
/isolate="NE125"
                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                         evidence=not_experimental
                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:11103"
                                                                                                                                                                                                                                                                                                                                                                                                organism="Hepatitis C virus"
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73.6%;
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                                                                                                                           Mismatches
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No. 1e-
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HPCNE274I
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AUTHORS
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E2/NS1; core protein; envelope protein.
Hepatitis C virus
Hepatitis C virus
Viruses; ssRNA positive-strand viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tokita,H., Shrestha,S.M., Okamoto,H., Sakamoto,M., Horikita Iizuka,H., Shrestha,S., Miyakawa,Y. and Mayumi,M. Hepatitis C virus variants from Nepal with novel genotypes their classification into the third major group J. Gen. Virol. 75 (Pt 4), 931-936 (1994)
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Hepatitis B virus subtypes and haspatitis C virus
patients with chronic liver disease in Nepal
Hepatology 19 (4), 805-809 (1994)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hiroaki Okamoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (06-JUL-1993)
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Tochigi-ken 329-04
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Jichi Medical School
                                                                                                                                                                                                                                                                                                                                                                                     phone:
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0285-44-1557.
/codon_start=1
/evidence=not_experimental
/product="core, env, and part
/protein_id="BAA04042.1"
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/mol_type="genomic RNA"
/isolate="NE274"
                                                                                                                                               'evidence=not_experimental
                                                                                                                                                                                                   db_xref="taxon:11103"
                                                                                                                                                                                                                                                                                                                                   ocation/Qualifiers
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ORIGIN

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Ohno,
                                                                                                                                                                                                                                                                      Hepatitis C virus
Hepatitis C virus
Viruses; ssRNA positive-strand
                                                                    Submitted (08-JUL-1993) Tomoyoshi Ohno, Nagoya City University Medical School, Second Department of Internal Medicine; 1-1 Kawasumi, Mizuho, Nagoya, Alchi 467, Japan (Tel:052-851-5511(ex.8748,2265), Fax:052-852-0849)
                                                                                                                                                                                                                                                                                                                                                       HPCHCV048
Hepatitis C virus DNA,
D16736
D16736.1 GI:506254
                                                                                                                                         Direct Submission
                                                                                                                                                                                                               Hepatitis C virus
                                                                                                                                                                                               Thesis (1993)
                                                                                                                                                                                                                                                                   Hepacivirus.
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GVRAVKTSERSEPRNRRQPIPKARRSEGRSWAQPEY PWPLYGWENLASPRG
SRPSWGPNDPRRBSRNLGKVIDTITCGFRADLMGYIFLYGGYPRLFUGGGGWAGWILLSPRG
GINPATGNLPGCSPSIFLLALLSCLVCPAAGIEYRNVSGLYVLTNDCSNGSIVYEAPB
VILHLPGCVPCVQSGNSSQCMIPVAPTVAVKYAGATTASIRSHYDLLVGAATLCSALY
VGDNCGAVELVGQAFTFRERQHNTVQTCNCSLYPGHISGHRMAWDMMNWSPAVGLVV
AHYLRLPQTIPDIIAGAHMGIMAGLAYYSWQTNWAKVPIIIVMFSGVDARTHTTGGVA
AHTTSSLTTLFTRGPSQNLQLIN"
/organism="Hepatitis C virus"
/mol_type="genomic RNA"
                                                   ocation/Qualifiers
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72.9%;
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Pred. No. 9.3e-57;
1; Mismatches 119;
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                                                                                                                       Tokita,H., Shrestha,S.M., Okamoto,H., Sakamoto,M. Iizuka,H., Shrestha,S., Miyakawa,Y. and Mayumi,M. Hepatitis C virus variants from Nepal with novel their classification into the third major group J. Gen. Virol. 75 (Pt 4), 931-936 (1994)
                  Immunology Division
Jichi Medical School
                                                       Hiroaki Okamot
                                                                       Submitted (06-JUL-1993)
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KEYWORDS SOURCE ORGANISM

ACCESSION

RESULT 13 HPCHCV048

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Query Match
Best Local Similarity
                                                                                                                                HPCNB137E

N Hepatitis C virus RNA for core, env, and partitis C virus RNA for core, env, and partitis C virus

M Hepatitis C virus
W Hepatitis C virus
Viruses; serNA positive-strand viruses, no
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              365 GACGGAGTGAACTATGCAACAGGGAATCTTCCTGGTTGCTCCTTTTCTATCTTCCTCCTC
Shrestha, S.M., Tsuda, F., Okamoto, H., Tokita, H., I
Tanaka, T., Miyakawa, Y. and Mayumi, M.
Hepatitis B virus subtypes and hepatitis C virus
patients with chronic liver disease in Nepal
hepatology 19 (4), 805-809 (1994)
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                                                                                                     (sites)
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/clone="BA-1"
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71.7%;
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ed. No. 1.1e-54;
Mismatches 126;
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Best Local S
Matches 318
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L39298
L39298.1 GI:845459
                                                                       HPCCOREE1S
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/product="core, env, and part of E2/NS1"
/protein_id="BA04038:1"
/db_xref="G1:475871"
/db_xref="G1:475871"
/db_xref="G1:475871"
/db_xref="G1:475871"
/db_xref="G1:475871"
/db_xref="G1:475871"
/db_xref="G1:475871"
/cranslation="MSTLEKEOROTKRNTYRRPONVKFPGGGOIVGGVVFLPRRGPRL
/cranslation="MSTLEKEOROTKRNTYRRPONVKFPGGGOIVGGVARALLAHGVELSPRG
SRPSWGPNDPRRSRNLGKVIDTLTCGFADLMGYIPLICAPVGGVARALLAHGVERALED
GNNYATGNLFGCSFSIFILALFSCLTCFASGLEYRNTSGLYVLTDCSNQSIVERADE
VILHLPGCVPCVATANQTSCWTPVSFTVAVKHLGATTASIRSHVDMLVGAATLCSALY
VGGLCGAVFLVGGAFTFSPRRHATVQTCNCSIVFGHISCHRMANDMANMSPALGLAV
SHLMRLPQTFFDLIAGAHWGVMAGLAYFSMQGNWAKVGIVLIMFSGVDAETHVTGGTV
SHLMRLPQTFFDLIAGAHWGVMAGLAYFSMQGNWAKVGIVLIMFSGVDAETHVTGGTV
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/mol_type="genomic R
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isolate="NE137"
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71.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 241.2; DB 1
Pred. No. 8.3e-54;
0; Mismatches 128
                                                        447 bp ss-RNA
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2 (bases 1 to 447)

van Doorn,L.J., Kleter,G.B., Stuyver,L., Maertens Schalm,S.W., Heijtink,R.A. and Quint,W.G. Sequence analysis of hepatitis C virus genotypes multiple novel subtypes in the Benelux countries J. Gen. Virol. 76 (Pt 7), 1871-1876 (1995)
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van Doorn,L.J., Kleter,B., Stuyver,L., Neschalm,S., Heijtink,R. and Quint,W.
Schalm,S., Heijtink,R. and guint,W.
Analysis of hepatitis C virus genotypes
correlation with antibody profiles
J. Hepatol. 21 (1), 122-129 (1994)
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/product="precursor protein"
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/protein_id="AAA67821.1"
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/mol_type="genomic RNA"
/db_xref="taxon:31652"
/clone="NL26"
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ALIGNMENTS

21-OCT-1994; 28-JUN-1995; AAT27962 standard; DNA; 447 Maertens G, Stuyver L; 23-OCT-1995; 09-MAY-1996. WO9613590-A2. Hepatitis C virus. Hepatitis C virus; subtype; polymerase chain reaction; amplification; PCR; primer; probe; antibody; infection; ss. Hepatitis C virus type 10a isolate NN98 bases 478-925. 11-MAR-1997 (INNO-) INNOGENETICS NV (first entry) 94EP-00870166. 95EP-00870076. 95WO-EP004155 BP.

Hepatitis C virus poly:nucleic acid unique to unidentified sub:type used to develop probes and primers for new sub:types and vaccines to prevent and treat infection. ç

WPI; 1996-251460/25. P-PSDB; AAR96551.

Claim 6; Fig 3; 150pp; English.

The sequences AAT27937-T27989 represent novel sequences isolated from hepatitis C virus subtypes different from subtypes la-c, 2a-d, 3a-f, 4a-j, 5a and 6a. They esp. from the novel subtypes ld-f, 2e-i, 2k, 2l, 3g, 4k-m, 7a-c or types 9, 10 or 11. The sequences corresp. to the 5' untranslated region (UR), the Core/E1, NS4 or NS5B regions of the genome. This sequence represents nucleotides 478-925 from the HCV type 10a isolate NE98. The new HCV types were isolated from patients with chronic

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RESULT 2
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AC AAQ7
XY 25-M
DT 21-J
XX Hepa
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   10-NOV-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT
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                                                                                                                                                                                                                                                                 virus Core/El region.
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(first en
                                                                                                                                Location/Qualifiers
                                                                         /product= "Core/E1 polypeptide."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-APR-1993;
05-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB;
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                   ACGGTCCAGACCTGTAACTGCTC
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CC Compositions comprising at least 5, and pref. 8 or more contiguous CC nuclectides selected from an HCV type 3 genomic sequence, more CP particularly (1) the region spanning positions 417-957 of the Core/E1 CC particularly (1) the region spanning positions 464-4730 of CP tregion of HCV subtype 3; (ii) the region spanning positions 464-4730 of CP the NS3 region of HCV type 3; (iv) the region spanning positions 4892-522 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 8023-8235 of the NS5 region of the NR36 subgroup of HCV subtype 3C positions 8023-8235 of the NS5 region of the NR36 subgroup of HCV subtype 3C amplify nucleic acid from an isolate belonging to a specific genotype, or 2C as a probe for specific detection/classification of nucleic acid. CC Polypeptides encoded by the nucleotides in such compositions may be used 2C for immunisation against HCV, for the detection of antibodies directed 3C against HCV and for serotyping. This sequence corresponds to the Core/E1 region of HCV subtype 3a and is taken from a clone designated HD10-2-21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 313; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Page 107-108; 404pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540 BP; 105 A; 153 C; 144 G; 138 T; 0 U; 0 Other;
                                                                           ATGTGTGGGGCCGTCTTCCTCGTGGGACAAGCCTTCACGTTCAGACCTCGTCGCCATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCTCCACTTACCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG
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ACTGTCCAGGACTGCAACTGTTC
                                                                                                                                                                                                                       AGGCATGTAGACATATTGGTGGGCGCGGCCACGATGTGCTCTGCTCTACGTGGGTGAT
                                                                                                                                                                                                                                                                                       ACGCACGTGGATATGATGGTGGGRGCGGCCACCCTATGCTCAGCTCTCTACGTAGGAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCCTGTGAGCCCYACCGTCGCCGTGAAGTCGCCCTGCGCCGCCACCGCCTCTCTCCGC
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93EP-00402019.
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Pred. No. 1.1e-
1; Mismatches
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                                                                                                                                Query Match
Best Local S
Matches 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polynucleotide sequences from hepatitis C virus - and related vectors, polypeptide(s) and antibodies, useful for immunisation, treatment, diagnosis and typing of HCV isolates.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                Sequence
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05-AUG-1993;
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20-JUL-1995
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DB; AAR63277.
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                                                                                                                                                 Similarity
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GCTCTGTTCTCTTGCTTAATCCATCCAGCAGCTAGTCTAGAGTGGCGGAACACGTCTGGC
                                                                GACGGGATAAATTTCGCAACAGGGAATTTGCCCGGTTGCTCCTTTTCTATCTTCCTT
                                                                                               GACGGAATTAATTTCGCAACAGGGAATTTACCTGGTTGCTCTTTCTCTATCTTCTCTG
                                                                                                                                                                                              541 BP; 104 A; 153 C; 145 G; 139 T; 0 U; 0 Other;
                             gcirigricicargciracarccacacacacacacacacacacacacacacata
                                                                                                                                   Conservative
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93EP-00402019.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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70.7%;
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                                                                                                                                               Score 236.2;
Pred. No. 1.1
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Compositions comprising at least 5, and pref. 8 or more contiguous nucleotides selected from an HCV type 3 genomic sequence, more particularly (i) the region spanning positions 417-957 of the Core/E1 region of HCV subtype 3a; (ii) the region spanning positions 4664-4730
                                                                                         New polynucleotide sequences from hepatitis C virus -vectors, polypeptide(s) and antibodies, useful for immureatment, diagnosis and typing of HCV isolates.
                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                          27-APR-1993;
05-AUG-1993;
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01-AUG-1995
                                                                   Claim
                                                                                                                                                                                      Maertens G,
                                                                                                                                                                                                                                                                                   27-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C virus type
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                                                                                                                                               1994-358277/44.
DB; AAR63281.
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                                                                 2; Page 111-112;
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ID 78036
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Best Local S
Matches 312
   WO9425601-A2
                                                                                                                                        Hepatitis C virus; HCV; primer; probe; detection; diagrams classification; immunisation; prophylaxis; serotyping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the NS3 region of HCV type 3; (iii) the region spanning positions 4892-5292 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 8023-8235 of the NS5 region of the BR36 subgroup of HCV subtype 3a; or (v) an HCV subtype 3c genomic sequence, may be used as primers to amplify nucleic acid from an isolate belonging to a specific genotype, or as a probe for specific detection/classification of nucleic acid. Polypeptides encoded by the nucleotides in such compositions may be used for immunisation against HCV, for the detection of antibodies directed against HCV and for serotyping. This sequence corresponds to the Core/El region of HCV subtype 3a and is taken from a clone designated BR36-9-20. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                             Hepatitis
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01-AUG-1995
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                                                                                                                                                                                                                                                                                                             AAQ78036 standard;
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                                                                                                                                                                                           virus Core/El region.
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Pred. No. 3.6e-63;
1; Mismatches 130;
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ACGCACGTGGATATGATGGTGGGGGGGCGCCCTATGCTCAGGTCTCTACGTAGGAGAC

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AGTCATGTGGACCTGTTAGTAGGCGCGCGCCACGATGTGCTCTGCGCTTTACGTGGGTGAT

CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGACATCGCCAGCATTGG

ATCCCTGTGAGCCCYACCGTCGCCGTGAAGTCGCCCTGCGCCACCGCCACCGCTCTCCGC

ATTCTGCACGCCCCGGCTGTGTACCTTGTGTCCAGGACGCCAATACGTCTACATGCTGG ATCCTCCACTTACCTGGCTGTGTCCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG

ACCCCAGTAACACCTACAGTGGCAGTCAGGTACGTCGGGGCAACCACCGCTTCGATACGC

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                                                                                                                                                                                                                                                                                          Compositions comprising at least 5, and pref. 8 or more contiguous uncleotides selected from an HCV type 3 genomic sequence, more particularly (i) the region spanning positions 417-957 of the Core/El region of HCV subtype 3a; (ii) the region spanning positions 4644-4730 of the NS3 region of HCV type 3; (iii) the region spanning positions 4682-5292 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 4892-5292 of the NS3/4 region of the NS3 region of the RNS3 subgroup of HCV subtype 3c genomic sequence, may be used as primers to amplify nucleic acid from an isolate belonging to a specific genetype, or as a probe for specific detection/classification of nucleic acid. Polypeptides encoded by the nucleotides in such compositions may be used against HCV and for serotyping. This sequence corresponds to the Core/El region of HCV subtype 3a and is taken from a clone designated BR33-1-20. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                    Query Match
Best Local S
Matches 312
                                                                                                                                                                                                                                                                                        Sequence 541 BP; 100 A; 154 C; 148 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New polynucleotide sequences from hepatitis C virus - vectors, polypeptide(s) and antibodies, useful for imm treatment, diagnosis and typing of HCV isolates.
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05-AUG-1993;
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182
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                                                                                                                                                                                CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT
                                                                                                          GCTTTGTTCTCATGCTTGCTTACACCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA
                                                                                                                                            GACGGGATAAACTTCGCAACAGGGAATTTGCCCCGGTTGCTCTTTTTCTATCTTCCTT
 CTCTATGTCCTTACCAACGACTGTTCCAATAGTAGTATTGTGTATGAGGCCGATGACGTT
                                                                        GCTCTGTTCTTCTTAATCCATCCAGCAGCTGGTCTAGAGTGGCGGAATACGTCTGGC
                                                                                                                                                                                                                      Conservative
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93EP-00402019.
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                                                                                                                                                                                                                    Score 234.6; DB 2;
Pred. No. 3.6e-63;
1; Mismatches 130;
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Compositions comprising at least 5, and pref. 8 or more contiguous uncleotides selected from an HCV type 3 genomic sequence, more particularly (1) the region spanning positions 417-957 of the Core/El region of HCV subtype 3a; (ii) the region spanning positions 464-4730 of the NS3 region of HCV type 3; (iii) the region spanning positions 4892-522 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 4892-522 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 8023-8235 of the NS5 region of the BR36 subgroup of HCV subtype 3a; or (v) an HCV subtype 3c genomic sequence, may be used as primers to amplify nucleic acid from an isolate belonging to a specific genotype, or as a probe for specific detection/classification of nucleic acid. Polypeptides encoded by the nucleotides in such compositions may be used for immunisation against HCV, and for serotyping. This sequence corresponds to the Core/El region of HCV subtype 3a and is taken from a clone designated BR36-9-13. (Updated on 25-WAR-2003 to correct PN field.)
                                                                                       Query Match
Best Local S
Matches 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotide sequences from hepatitis C virus - vectors, polypeptide(s) and antibodies, useful for imm treatment, diagnosis and typing of HCV isolates.
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                                                                                                                                                   Sequence 541 BP; 107 A; 155 C; 142 G; 137 T; 0 U;
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05-AUG-1993;
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01-AUG-1995
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                              GACGGGATAAATTTCGCAACAGGGAATTTGCCCGGTTGCTCCTTTTCTATTTTCCTTCTT 121
                                                                                       Conservative
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(first entry)
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Pred. No. 3.6e-63;
1; Mismatches 130;
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Compositions comprising at least 5, and nucleotides selected from an HCV type 3
                                                                                                                                                                                                                                            27-APR-1993;
05-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
21-JUL-1995
                                            Claim
                                                                                                                                                                                 Maertens G,
                                                                                                                                                                                                                                                                                         27-APR-1994;
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RESULT 6
AAQ78032
AAQ

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New polynucleotide sequences from hepatitis C virus - and relate vectors, polypeptide(s) and antibodies, useful for immunisation, treatment, diagnosis and typing of HCV isolates.
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                                                                                                                                                                                                                                                                           WPI; 1994-358277/44.
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                                                                                2; Page 105-106; 404pp; English.
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93EP-00402019
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pref. 8 or more contiguous
genomic sequence, more
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RESULT 8
AAQ78034
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AC AAQ7
XC AAQ7
XC Hepa
XX Hepa
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Best Local (
                                                                                        Hepatitis C virus; HCV; primer; probe; detection; diagnosis; classification; immunisation; prophylaxis; serotyping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         particularly (i) the region spanning positions 417-957 of the Core/El region of HCV subtype 3a; (ii) the region spanning positions 4664-4730 of the NS3 region of HCV type 3; (iii) the region spanning positions 4892-5292 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 4892-5292 of the SS24 of the NS5 region of the BR36 subgroup of HCV subtype positions 8023-8235 of the NS5 region of the BR36 subgroup of HCV subtype 3a; or (v) an HCV subtype 3c genomic sequence, may be used as primers to amplify nucleic acid from an isolate belonging to a specific genotype, or as a probe for specific detection/classification of nucleic acid. Polypeptides encoded by the nucleotides in such compositions may be used for immunisation against HCV, for the detection of antibodies directed against HCV and for serotyping. This sequence corresponds to the Core/El region of HCV subtype 3a and is taken from a clone designated HD10-2-14. (Updated on 25-MAR-2003 to correct PN field.)
                                                                 Hepatitis
                                                                                                                                      Hepatitis
                                                                                                                                                                 25-MAR-2003
01-AUG-1995
                                                                                                                                                                                                                                  AAQ78034 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 541 BP; 106 A; 154 C; 143 G; 138 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                    virus Core/El region
                                                                 virus type
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(first entry)
            2. .541
/*tag=
                                      Location/Qualifiers
/product= "Core/E1 polypeptide
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Pred. No. 1.1e-62;
1; Mismatches 131
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ATCCCTGTGAGCCCYACCGTCGCCGTGAAGTCGCCCTGCGCCCACCGCCTCTCTCCGC

ATTCTGCACGCCCCGGCTGTGTACCTTGTGTCCAGGACGCCAATACGTCAACATGCTGG

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121

60

ACCCCAGTAACACCTACAGTGGCAGTCAGGTACGTCGGGGCAACCACCGCTTCGATACGC

301

ACGCACGTGGATATGATGGTGGGGGGCGCCCCTATGCTCAGGTTCTACGTAGGAGAC

360 361 300 301 240

421

422 361

ATGTGTGGGGCCGTCTTCCTCGTGGGACAAGCCTTCACGTTCAGACCCCCGCCGCCATCAA CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGCTTCTCATGGAGACATCGCCAGCATTGG

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CC Compositions comprising at least 5, and pref. 8 or more contiguous CC nuclectides selected from an HCV type 3 genomic sequence, more C particularly (i) the region spanning positions 417-957 of the Core/El CC particularly (i) the region spanning positions 4464-4730 of the NS3 region of HCV type 3; (ii) the region spanning positions 4684-4730 of the NS3 region of HCV type 3; (iii) the region spanning positions 4892-CC 5292 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 4892-CC 5293 of the NS3/4 region of the BR36 subgroup of HCV subtype 3C positions 8023-8235 of the NS5 region of the BR36 subgroup of HCV subtype 3C and pify nucleic acid from an isolate belonging to a specific genotype, or CC as a probe for specific detection/classification of nucleic acid. The probe for specific detection/classification of nucleic acid. The probe for specific detection of the detection of acid. The compositions may be used against HCV and for secrotyping. This sequence corresponds to the Core/El region of HCV subtype 3a and is taken from a clone designated BR33-1-10. CC (Updated on 25-MAR-2003 to correct PN field.)
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 541 BP; 100 A; 157 C; 148 G; 136 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polynucleotide sequences from hepatitis C virus vectors, polypeptide(s) and antibodies, useful for i treatment, diagnosis and typing of HCV isolates.
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05-AUG-1993;
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                                                                                                                  CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT
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ATCCTCCACTTACCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG
                                                                                                                                                                                                       GCTCTGTTCTCTTGCTTAATCCATCCAGCAGCTGGTCTAGAGTGGCGGAATACGTCTGGC
                                                                                                                                                                                                                                                                                                                             CTCTATGTCCTTACCAACGACTGTTCCAATAGTAGTATTGTGTATGAGGCCGATGACGTT
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93EP-00402019.
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70.2%;
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Pred. No. 1.1e-62;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 541;
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                                                                                                                                                                                                                                                                       compositions comprising at least 5, and pref. 8 or more contiguous nucleotides selected from an HCV type 3 genomic sequence, more particularly (i) the region spanning positions 417-957 of the Core/Ei region of HCV subtype 3a; (ii) the region spanning positions 4644-4730 of the NS3 region of HCV type 3; (iii) the region spanning positions 4892-529 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 4892-5292 of the NS3/4 region of HCV type 3; (iv) the region spanning positions 4892-5292 of the NS5 region of the BR36 subgroup of HCV subtype 3c genomic sequence, may be used as primers to as a probe for specific detection/classification of secific genotype, or as a probe for specific detection/classification of nucleic acid. Polypeptides encoded by the nucleotides in such compositions may be used for immunisation against HCV, for the detection of antibodies directed against HCV and for serotyping. This sequence corresponds to the Core/Ei region of HCV subtype 3a and is taken from a clone designated BR33-1-19. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                Matches
                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New polynucleotide sequences from hepatitis C virus - and related vectors, polypeptide(s) and antibodies, useful for immunisation, treatment, diagnosis and typing of HCV isolates.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-APR-1993;
05-AUG-1993;
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                                                                                                                                                                                                                        541 BP; 100 A; 155 C; 148 G; 138 T; 0 U; 0 Other;
                                                     ACGGTCCAGACCTGTAACTGCTC
  ACTGTCCAGGACTGCAACTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      virus type 3a
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                                                                                                                                        Score 233;
Pred. No. 1.
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AAT12704-T12709 and AAT12961-T12974 represent hepatitis C virus (HCV) E1 and E2 protein coding sequence constructs. These sequences are included in vectors for the production of recombinant E1. E2, and E1/E2 proteins. The recombinant proteins can then be isolated using a method of the invention. In the method, the envelope proteins are purified by carrying out a disulphide bond cleavage, or a reduction step with a disulphide bond cleavage, or a reduction step with a disulphide bond cleavage agent, after lysis of recombinant host cells. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Purifying recombinant hepatitis C virus (HCV) E1 and E2 envelope proteins - in presence of di:sulphide bond cleavage agent, to produce proteins suitable for direct use in vaccines or diagnostic assays of HCV.
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Best Local Simi
Matches 311;
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11-JAN-2001; 2001US-0260669P
30-AUG-2001; 2001US-0315768P
                                                                                                                                                Hepatitis C
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                                              11-JAN-2002; 2002WO-EP000219
                                                                                                                                                                               virucide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGACATCGCCAGCATTGG
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                                                                                                                                                                                                                                 a
                                                                                                                                                                               immunostimulant;
                                                                                                                                                                                                C virus; HCV; E1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               containing the purified HCV envelope proteins can be used for humans against HCV, for in vitro detection of HCV antibodies
                                                                                                                                                virus.
                                                                                                                                                                                                                                 virus clone HCCI62
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70.2%;
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                                                                                                                                                                               vaccine;
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Pred. No. 1.2e-62;
1; Mismatches 131; Indels
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                                                                                                                                                                                 B2 protein;
ds.
                                                                                                                                                                                                infection;
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                                                                                                                                                                                              gene;
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RESULT 12
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Matches 311
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New therapeutic vaccine compositions comprising at least one purified recombinant hepatitis C virus (HCV) single or specific oligomeric recombinant envelope protein El or E2, useful for immunizing humans fi HCV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; Page 181-182; 243pp; English
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DB; AAO18670.
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                         ACTGTCCAGGACTGCAACTGTTC
                                                                    ATGTGTGGGGCTGTCTTCCTCGTGGGACAAGCCTTCACGTTCAGACCTCGTCGCCATCAA
                                                                                                                                                                    ACGCACGTGGATATGATGGTGGGRGCGGCCCACCCTATGCTCAGCTCTACGTACGTAGGAGAC
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ACGGTCCAGACCTGTAACTGCTC
                                                                                                 CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGACATCGCCAGCATTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 233; DB
Pred. No. 1.2e-
1; Mismatches
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566
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(first entry)

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Query Match
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Matches 311;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention comprises an Hepatitis C virus (HCV) vaccine for reducing liver disease. The vaccine of the invention comprises an HCV E1 or E2 protein as an antigen. The HCV vaccine is useful for reducing liver disease (e.g. liver fibrosis) in a Chronic HCV-infected mammal. The present DNA sequence encodes an HCV E1/E2 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hepatitis C virus (HCV) vaccine composition, useful for reducing liver disease, e.g., liver fibrosis in a chronic HCV-infected mammal
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16-OCT-2002; 2002US-0418358P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis C virus; HCV; vaccine; liver disease; El protein; E2 protein; liver fibrosis; ds; gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis C virus E1/E2 protein coding sequence
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                                                                                CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGAGACATCGCCAGCATTGG
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                                                                                                                                                                                                                ATCCCTGTGAGCCCYACCGTCGCCGTGAAGTCGCCCTGCGCCGCCACCGCCTCTCTCCGC
                                                                                                                                                                                                                                                                ATCCTCCACTTACCTGGCTGTGTCCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG
                                                                                                                                                                                                                                                                                                                                                                       GCTCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTGTTCTCATGCTTGCTTACACCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                   GACGGGATAAATTTCGCAACAGGGAATTTGCCCCGGTTGCTCCTTTTCTATTTTCCTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACGGAATTAATTTCGCAACAGGGAATTTACCTGGTTGCTCTTTCTCTATCTTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           630 BP; 127
                            ACTGTCCAGGACTGCAACTGTTC
                                                             ATGTGTGGGGCTGTCTTCCTCGTGGGACAAGCCTTCACGTTCAGACCTCGTCGCCATCAA
                                                                                                                                                                                  ACCCCAGTGACACCTACAGTGGCAGTCAAGTACGTCGGAGCAACCACCGCTTCGATACGC
                                                                                                                                                                                                                                               ATTCTGCACACACCCGGCTGCATACCTTGTGTCCAGGACGGCAATACATCCACGTGCTGG
                                                                                                                                                                                                                                                                                                          CTCTATGTCCTTACCAACGACTGTTCCAATAGCAGTATTGTGTACGAGGCCGATGACGTT
                                                                                                                                                                                                                                                                                                                                      CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT
                                                                                                                        AGTCATGTGGACCTATTAGTGGGCGCGGCCACGATGTGCTCTGCGCTCTACGTGGGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                       CTTGCTTAATTCATCCAGCAGCTAGTCTAGAGTGGCGGAATACGTCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52.1%;
70.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; 175 C; 168 G; 160 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29; 271pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bosman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 233;
Pred. No. 1.
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566
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1.2e-62;
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ADP711119
ID ADP71
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AC ADP71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MABR/) MAERTENS G. (DEPL/) DEPLA E. (BOSM/) BOSMAN F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-DEC-2001; 2001US-0453708P
16-OCT-2002; 2002US-0418358P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hepatitis C virus; type 3a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        steatosis; anti-E2 immunoreactivity; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis C virus; HCV; El glycoprotein; E2 glycoprotein; HCV infection;
liver disease; liver fibrosis; ss; serum alanine aminotransferase level;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADP71119;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-DEC-2002; 2002US-00321798
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)B; ADP71120.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein HCC162
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Use of hepatitis C virus (HCV) vaccine composition for reducing liver disease, serum alanine aminotransferase levels, steatosis, or anti-E2 immunoreactivity in the liver of a chronic HCV-infected mammal.

Example 2; SEQ ID NO 29; 176pp; English.

CC reduced by at least 1-2 points according to the overall Ishak score in CC the HCV-infected mammal. Also included are a method for predicting CC changes in liver disease in a chronic HCV-infected mammal, a therapeutic CC CMCV vaccine composition (comprising at least one purified or a combination of at least 2 HCV single or specific oligomeric recombinant CC envelope protein selected from an E1 or E2 proteins a part of E1 and E2 CC proteins, an E1/E2 protein complex formed from purified HCV single or specific oligomeric recombinant E1 or E2 proteins or its parts and CC optionally a pharmaceutical adjuvant), a composition (comprising at least cone E1 or E2 peptide, and optionally, a pharmaceutical adjuvant), an CC recombinant virus allowing expression of at least one HCV recombinant CC envelope protein (selected from an E1 protein and/or an E2 protein, and their parts, and optionally, a pharmaceutical adjuvant) and entering a recombinant virus allowing expression of at least one HCV recombinant composition (comprising a recombinant virus allowing expression of at least one HCV recombinant composition and/or an E2 protein, and their parts, and optionally, a pharmaceutical adjuvant) and an HCV vaccine composition is of at least one HCV recombinant envelope protein composition is constituted adjuvant. The HCV vaccine composition is constituted adjuvant. The HCV vaccine composition is constituted adjuvant. The HCV vaccine composition is constituted the liver in a chronic HCV-infected mammal, part for treating a chronic HCV infected mammal, part of treating a chronic HCV infected mammal, are useful for conversing an E1 protein HCV infected mammal, parts the response to treatment conversed to the patients suffering from HCV infected mammal. The invention relates to the use of a hepatitis C virus (HCV) vaccine composition for reducing liver disease (such alter fibrosis or its progression), serum alanine aminotransferase (ALT) levels, steatosis, o anti-E2 immunoreactivity in the liver of a chronic HCV-infected mammal, or for treating a chronic HCV-infected mammal. The liver disease is 四 protein ô fragment) ဓ္

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                                                                                                                                                                                                     15-SEP-1989;
21-DEC-1989;
17-SEP-1990;
                       WPI; 1999-480843/41
                                                               Miyamura T,
Cha T, Irvi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HCV J1 NS domain consensus DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAR-2003
08-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ07658 standard; DNA; 1249
                                                                                                                                                                                                                                                                                                 17-SEP-1990;
                                                                                                                                                                                                                                                                                                                                           01-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                        EP939128-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                  Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCV infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis C virus; HCV;
                                                                                                                                      (OYAA/)
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                                                                                                                                      OYA A.
CHIRON
                                                                 Irvine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCCCAGTGACACCTACAGTGGCAGTCAAGTACGTCGGAGCAACCACCGCTTCGATACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>ATCCCTGTGAGCCCYACCGTCGCCGTGAAGTCGCCCTGCGCCGCCACCGCCTCTCTCCGC</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
(first en
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                                                                                       Saito I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B₽;
                                                                                                                                                                                                     89US-00408045.
89US-00456142.
90EP-00310149.
                                                                    BD;
                                                                                                                                      CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vaccine;
                                                                                                                                                                                                                                                                                                 99EP-00101746
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                                                                                         Houghton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J1; J7; HCV-1; non-A, non-B ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 233; DB 12; Length 630;
Pred. No. 1.2e-62;
1; Mismatches 131; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВP
                                                                                         Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        566
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                                                                                       Weiner AJ,
                                                                                         Han
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HCV; NANBH;
                                                                                       Kolberg JA;
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PT New Hepatitis C Virus isolates, useful for diagnosis of hepatitis PT infections and development of vaccines.

XX Disclosure; Fig 14; 132pp; English.

XX The invention provides two new isolates of hepatitis C virus (HCV), J1 CC and J7. These two isolates comprise nucleotide and amino acid sequences CC that are distinct from the HCV isolate HCV-1. The nucleotides by CC hybridisation for diagnosis of NANBH infections. They may also be used to detect non-A, non-B HCV (NANBH) polynucleotides by CC hybridisation for diagnosis of NANBH infections. They may also be used to screen blood donors, donated blood and blood products for this infection. CC The isolates may also be used to isolate other naturally occurring CC variants of the virus. The polypeptides may be used as a vaccine for administration to patients to protect against infection with NANBH. The CC present sequence represents the NS1 domain consensus sequence of HCV isolates J1 and HCV-1. (Updated on 20-MAR-2003 to correct PF field.)

XX Sequence 1249 BP; 160 A; 282 C; 276 G; 206 T; 0 U; 325 Other;

Query Match

49.5%; Score 221.4; DB 2; Length 1249;

Best Local Similarity 54.6%; Pred. No. 7.2e-59;
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308
488
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ACRRYRCARGRYTGCAAYTGCTCWATC 514
                                                                                                                                      CGYCACRTCGAYYTGCTYGTGGGASSGCYRCYYTCTGYTCSGCYMTSTACGTGGGGGAY
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                                                                                              CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGACATCGCCAGCATTGG
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ARQ35072
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ARC
ARQ35
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AAQ35072; 20-MAY-1993

(first entry)

HCV envelope region nucleic acid

Envelope; region; type
non-A, non-B; amplify;

88 C:

hepatitis;

virus; HCV; vaccine;

serum;

Hepatitis C virus JP04349885-A.

AAQ35072 standard; DNA; 565

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Matches

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Conservative

83;

Mismatches 120; Indels

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                                                                                                                                                                                                                                                                                                                                                                                            This sequence encodes a novel envelope region of type C hepatitis virus (HCV). This fragment can be used for the preparation of a vaccine for hepatitis C. This fragment was prepared from the serum of non-A, non-B hepatitis patients and the envelope region DNA was amplified by PCR using the primer sequences given in AAQ35073-76
                                                                                                                                                                                                                                                                                                                                                                          Sequence 565 BP; 61 A; 92 C; 106 G; 85 T; 0 U; 221 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Envelope region nucleic acid fragment - for type {\tt C} hepatitis virus (I), for producing vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1993-022708/03
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                                        YIBIGCGGRTCYGTYTTYCTYRTYTCYCABYTGTTTACCYTCTMBMCYMGSMDGYAYGDG
                                                    CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGGTTCTCATGGAGACATCGCCAGCATTGG
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Search completed: December 29, 2004, 14:44:00 Job time : 359 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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1: /cgn2_6/ptodate/1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodate/1/ina/5B_COMB.seq:*

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4: /cgn2_6/ptodate/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodate/1/ina/PCTUS_COMB.seq:*

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Gapop 10.0 , Gapext 1.0
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                           US-08-836-075A-51

US-09-878-281A-13

US-09-878-281A-19

US-09-878-281A-25

US-09-878-281A-25

US-09-878-281A-25

US-09-878-281A-27

US-09-878-281A-27

US-08-612-973-29

US-08-927-597-29

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US-09-878-281A-175

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US-09-878-281A-173

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Sequence 51, Appl Sequence 17, Appl Sequence 17, Appl Sequence 19, Appl Sequence 21, Appl Sequence 25, Appl Sequence 27, Appl Sequence 27, Appl Sequence 29, Appl Sequence 177, Appl Sequence 117, Appl Sequence 118, Appl Sequence 115, Appl Seq
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                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Microsoft Word 6.0 / ASCII text output
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/836,075A
FILING DATE: 21 Apr 1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/EP95/04155
FILING DATE: 23 Oct 1995
PRIOR APPLICATION NUMBER: PCT/EP95/04155
PILING DATE: 23 Oct 1995
PRIOR APPLICATION NUMBER: EP 94870166.9
PILING DATE: 21 Oct 1994
PRIOR APPLICATION NUMBER: EP 95870076.7
PILING DATE: 21 Oct 1994
PRIOR APPLICATION NUMBER: EP 95870076.7
PILING DATE: 28 JUN 1995
ATTORNEY/AGENT INFORMATION:
NAME: KAMMERER, PATRICIA A.
REGISTRATION NUMBER: 29,775
PREPENCY / OCCUPT NUMBER: 29,775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 51, Appli
Patent No. 6180768
                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: I
INFORMATION FOR SEQ ID NO: 51:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MAERTENS, APPLICANT: STUYVER, ITILE OF INVENTION: ITILE OF INVENTION: ITILE OF INVENTION: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                  LENGTH: 447 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 77210-4433
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: P.O. B
CITY: HOUSTON
STATE: TEXAS
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NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
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US-07-965-285-30
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US-09-201-912-30
US-08-612-973-7
US-08-612-973-5
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Sequence 15, Appl
Sequence 15, Appl
Sequence 35, Appl
Sequence 30, Appl
Sequence 7, Appl
Sequence 47, Appl
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Result No.

Score

Query Match

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445.8 236.2 236.2 234.6

Minimum Maximum

DB BDB

seq length: 0 seq length: 2000000000

Title: Perfect score:

US-09-851-138C-51 447

Scoring table: Sequence: Run on: OM nucleic -

nucleic search, using sw

Database

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Sequence 13, Application US/09878281A
Patent No. 6762024
GENERAL INFORMATION:
APPLICANT: Innogenetics N.V.
ITITLE OF INVENTION: New sequences of hepatitis C v
ITITLE OF INVENTION: and therapy
FILE REFERENCE: 35
CURRENT APPLICATION NUMBER: US/09/878,281A
CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOSTWARE: Patentin version 3.1
LENGTH: 541
TYDE: DAY
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Best Local Similarity 100.
Matches 447; Conservative
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  ATCCTCCACTTACCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG
                                                     CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCCGGGGATATT
                                                                                 GCTCTGTTCTCTTGCTTAATCCATCCAGCAGCTAGTCTAGAGTGGCGGAACACGTCTGGC
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Pred. No. 1.8e-61;
1; Mismatches 129;
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US-09-878-281A-17
; Sequence 17, Application US/09878281A
; Patent No. 6752024
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; ORGANISM: hepatitis
US-09-878-281A-17
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CURRENT FILLING DATE: 2001-06-12
CURRENT FILLING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWAKE: PATENTIN VERSION 3.1
SEQ ID NO 17
LENGTH: 541
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APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of hepatitis C virus genotypes for diagnosis, proph
TITLE OF INVENTION: and therapy
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Matches 313;
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Pred. No. 1.8e-61;
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Sequence 15, Application US/09878281A
Patent No. 6763024
GENERAL INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of hepatitis C
TITLE OF INVENTION: and therapy
FILE REFERENCE: 35
CURRENT APPLICATION NUMBER: US/09/878,281A
CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWARE: Patentin version 3.1
SEQ ID NO 15
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US-09-878-281A-15
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US-09-878-281A-19
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; ORGANISM: hepatitis C virus
US-09-878-281A-19
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PATENT NO. 6762024
GENERRAL INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of hepatitis
TITLE OF INVENTION: and therapy
FILE REFERENCE: 35
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 19
LENGTH: 541
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Best Local Similarity 70.4%;
Matches 312; Conservative
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Pred. No. 5.5e-61;
1; Mismatches 130;
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Best Local Similarity
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TYPE: DNA
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CURRENT APPLICATION NUMBER: US/09/878,28
CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOPTWARE: PatentIn version 3.1
SEQ ID NO 21
LENGTH: 541
TYPE: DNA
ORGANISM: hepatitis C virus
US-09-878-281A-21
                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of hepatitis
TITLE OF INVENTION: and therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21, Application US/09878281A Patent No. 6762024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             302 ACCCCAGTGACACCTACAGTGGCAGTCAGGTACGTCGGAGCCACCGCTTCGATACGC
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61 GCTTTGTTCTCATGCTTGCTTACACCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA 120
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                                            GACGGGATAAATTTCGCAACAGGGAATTTGCCCCGGTTGCTCCTTTTCTATTTTCCTTCTT 121
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                                                                                                                        Score 233; DB 4;
Pred. No. 1.7e-60;
1; Mismatches 131
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Pred. No. 1.7e-60;
1; Mismatches 131
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CURRENT APPLICATION NUMBER: US/09/878,281A
CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 541
TYPE: DNA
ORGANISM: hepatitis C virus
US-09-878-281A-25
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US-09-878-281A-25
; Sequence 25, Application US/09878281A
; Patent No. 6762024
; GENERAL INFORMATION:
; APPLICANT: Innogenetics N.V.
; TITLE OF INVENTION: New sequences of hepatitis
; TITLE OF INVENTION: and therapy
; FILE REFERENCE: 35
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Best Local Similarity
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                                                                                                   ACCCCAGTAACACCTACAGTGGCAGTCAGGTACGTCGGGGCAACCACCGCTTCGATACGC
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Pred. No. 1.7e-60;
1; Mismatches 131;
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CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWARE: PatentIn version 3.1
SEQ ID NO 27
LENGTH: 541
TYPE: DNA
ORGANISM: hepatitis C virus
US-09-878-281A-27
                                                                                                                 RESULT 9
US-08-612-973-29
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US-09-878-281A-27
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Sequence 29, Application US/08612973
PATENT NO. 6150134
GENERAL INFORMATION:
APPLICANT: MAERTENS, GEERT
APPLICANT: BOSMAN, FONS
APPLICANT: BURNEYOFF, GUY
APPLICANT: BUYSE, MARIE-ANGE
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GENERAL INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of TITLE OF INVENTION: and therapy
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Pred. No. 1.7e-60;
1; Mismatches 131
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Best Local (
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-08-612-973-29
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INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 630 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
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TITLE OF INVENTION: PRO
NUMBER OF SEQUENCES: 1:
CORRESPONDENCE ADDRESS:
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NAME/KEY:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 816-4000
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NAME: BYRNE, THOMAS E.
REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
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TYPE: nucleic acid
STRANDEDNESS: single
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11; Conservative
CTTTGTGGAGCGCTATTTCTTGTYGGGCAGGGTTCTCATGGAGACATCGCCAGCATTGG 420
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                                                                                       ACGCACGTGGATATGATGGTGGGRGCGGCCACCCTATGCTCAGCTCTCTACGTAGGAGAC 360
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1100 NORTH GLEBE ROAD
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70.2%;
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Pred. No. 1.8e-60;
1; Mismatches 131;
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US-08-927-597-29
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US-08-927-597-29
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APPLICANT: MARRIEN
APPLICANT: BOSMAN,
APPLICANT: DE MART
APPLICANT: BUYSE,
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Best Local (
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APPLICATION NUMBER: US/08/927,597
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/612,973
FILING DATE: 11-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: BYRNE, THOMAS E.
REGISTRATION NUMBER: 32,205
REFERENCE/DOCKET NUMBER: 1487-10
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 816-4000
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Va
CURRENT APPLICATION DATA:
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NAME/KEY:
LOCATION:
FEATURE:
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TITLE OF INVENTION: PROTEINS FOR DIAGNOSTIC AND THERAPEUTIC USE
                                                                                                                                                                                                                                                                                                                           ANTI-SENSE:
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                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
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TOPOLOGY: linear
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 184 GCTCTGTTCTCTTAATTCATCCAGCAGCTAGTCTAGAGTGGCGGAATACGTCTGGC
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                                61 GCTTTGTTCTCATGCTTGCTTACACCCACAGCCGGGCTGGAGTACCGTAATGCCTCCGGA 120
                                                                                       Similarity 70.2%;
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1100 NORTH GLEBE ROAD
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DE MARTYNOFF, GUY
BUYSE, MARIE-ANGE
NVENTION: PURIFIED H
                                                                                                                                     Conservative
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Pred. No. 1.8e-60;
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                                                                                                                                                                   Length 630
                                                                                                                                     Indels
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Sequence 23, Application US/09878281A
Patent No. 6762024
PALENDRY INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of hepatiti
TITLE OF INVENTION: and therapy
FILE REFERENCE: 35
CURRENT APPLICATION NUMBER: US/09/878,281A
CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWARE: PatentIn version 3.1
SEQ ID NO 23
LENGTH: 541
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US-09-878-281A-23
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA ORGANISM: hepatitis
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Pred. No. 5.1e-60;
1; Mismatches 132;
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Sequence 120, Application US/09878: Patent No. 6762024
GENERAL INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences
TITLE OF INVENTION: and therapy
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Sequence 177, Application US/09878281A
; Patent No. 6762024
; GENERAL INFORMATION:
; APPLICANT: Innogenetics N.V.
; TITLE OF INVENTION: New sequences of hepatiti
; TITLE OF INVENTION: New sequences of hepatiti
; TITLE OF INVENTION NUMBER: US/09/878,281A
; CURRENT APPLICATION NUMBER: US/09/878,281A
; CURRENT FILING DATE: 2001-06-12
; NUMBER OF SEQ ID NOS: 284
; SOFTMARE: PatentIn version 3.1
; SEQ ID NO 177
; LENGTH: 579
; TYPE: DNA
; ORGANISM: hepatitis C virus
US-09-878-281A-177
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US-09-878-281A-177
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Pred. No. 8.4e-56;
2; Mismatches 143;
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; FILE REFERENCE: 35
; CURRENT APPLICATION NUMBER: US/09/878,281A
; CURRENT FILING DATE: 2001-06-12
; NUMBER OF SEQ ID NOS: 284
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 120
; SEQ ID NO 120
; LENGTH: 574
; TYPE: DNA
; ORGANISM: hepatitis C virus
US-09-878-281A-120
                                                                                                           Sequence 175, Application US/09878281A
Patent No. 6762024
GENERAL INFORMATION:
APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences of hepatitis C 1
TITLE OF INVENTION: and therapy
FILE REFERENCE: 35
CURRENT APPLICATION NUMBER: US/09/878,281A
CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWARE: Patentin version 3.1
SEQ ID NO 175
LENGTH: 579
TYPE: DNA
ORGANISM: hepatitis C virus
US-09-878-281A-175
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                                                  Score 215.8; DB 4;
Pred. No. 2.5e-55;
2; Mismatches 144;
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Pred. No. 2.5e-55;
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ORGANISM: hepatitis C virus

FEATURE:

NAME/KEY: misc feature

LOCATION: (152)..(152)

OTHER INFORMATION: "n" is any nu
US-09-878-281A-181
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CURRENT FILING DATE: 2001-06-12
NUMBER OF SEQ ID NOS: 284
SOFTWARE: PatentIn version 3.1
SEQ ID NO 181
LENGTH: 579
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Best Local Similarity
Matches 301; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Innogenetics N.V.
TITLE OF INVENTION: New sequences
TITLE OF INVENTION: and therapy
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                                                                                               CTCTACATGGTAACTAACGACTGCAGTAACGGTAGTATCGTGTATGAGGCCGGGGATATT
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      ATCATGCACTTACCAGGGTGCATACCCTGCGTGAGGACCGGGAACGTTTCGCGCTGCTGG
                                   ATCCTCCACTTACCTGGCTGTGTCCCCTGCGTACGCTCTGGCAATACATCAAGATGCTGG
                                                                  ATCTACCACGTCACCAATGATTGCCCGAATTCCCAGCATAGTGTATGAAGCCGATCACCAC
                                                                                                                                  GCACTTCTCGTGCCTGACTGTCCCGGCCTCGGCTCAGCACTACCGGAATGTCTCGGGC
                                                                                                                                                                                                GACGGGATTAACTACGCAACAGGGAATCTTCCTGGTTGCTCTTTCTCTATCTNCCTTCTG
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1; Mismatches 144;
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Search completed: December 29, 2004, 16:01:13 Job time : 82 secs